

DEPARTMENT OF THE AIR FORCE

OFFICE OF THE CHIEF OF STAFF WASHINGTON, DC

15 JUN 1998

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Air Force Environment, Safety and Occupational Health Committee (ESOHC)

Meeting Minutes

The AF ESOHC met May 15, 1998. Lt Gen Vesely and Mr. McCall co-chaired the meeting. Individuals attending from offices with required membership were as follows:

HQ USAF/CVA	Lt Gen Vesely	HQ USAF/ILS	Col Totsch
HQ USAF/IL	Lt Gen Hallin	SAF/GCN	Mr. Sheuerman
SAF/MIQ	Mr. McCall	HQ USAF/SGO	Col New
HQ USAF/SE	Maj Gen Gideon	HQ USAF/SF	Lt Col Snow
I-IQ USAF/IG	Maj Gen Hessert	HQ USAF/RE	Col Koepp
HQ USAF/ILE	Brig Gen Sheehan	HQ USAF/XPP	Mr. MacMichael
NGB/CF	Brig Gen McKinley	SAF/LL	Maj Underwood
I-IQ USAF/XOO	Brig Gen (sel) Peterson	I-IQ USAF/JA	Col Schlabs
SAF/AQR	Dr. Hellwig	SAF/FMBO	Lt Col Henderson
SAF/DP	Ms. O'Neill		

Opening Remarks

Mr. McCall began the meeting by summarizing his visit over the last two days in a forum where representatives from more than **100** leading industries discussed moving to an integrated Environment, Safety and I-lealth approach in order to improve their business processes. He said this underscores that the AF is on the right track with our ESOIH Committee and the upcoming presentation by Maj Gen Gideon was an example of the value of a broadened horizon for the committee. Gen Vesely welcomed Gen Gideon and stated that Explosives Safety Quantity-Distance was a very important and a tough issue. He advised the committee he would have to depart a few minutes early.

Framework for Granting Explosives Safety Quantity-Distance (QD) Waivers and Escmptions in Korea

Major General Francis Gideon summarized the presentation provided on 2 Apr 98 to Mr. Peters, the Acting Secretary of the Air Force. As a result of the 2 Apr 98 briefing, AF/SE received a tasking to implement the recommendations. Gcn Gideon stated DoD regulations and AFI's require quantity-distance (QD) separations between weapons storage/operations and non-participating resources. AF/SE conducted the study in response to concerns from SecAF over the more than

4,000 exemptions and waivers in Korea. The study determined that each service counts waivers differently and has different waiver approval levels. The study generated the following evaluations and recommendations:

- 1. Develop a process where the approval level is established based on the risk to be accepted and the political situation with the lowest required level of approval being the Wing Commander and the highest level being SAF/MI. Discussion: Mr. Peters modified this recommendation to require SecAF approval when the waiver required new construction or at the recommendation of SAF/MI.
- 2. Actively engage the Korean government at high levels to find ways to mitigate explosives hazards. Discussion: General Hessert stated that there had been recent changes in military and civilian leadership in Korea that may make these discussions more fruitful.
- 3. Develop an effective means to determine the munitions risks associated with proposed changes to force structure, mission changes, and weapons requirements.
- 4. Finalize simplification of site planning software and require all Korean bases be provided the recommended software by 1 Jan 04. Discussion: The updating of the required data to use the software has not been funded and is estimated to cost \$2M. General Gideon stated that PACAF will POM for the required funds.
- 5. Continue the Red Ribbon Panel initiatives by testing weapons under development to determine hazards in operational configurations and by conducting additional testing of weapons in the inventory to determine hazards in operational configurations. Discussion: Dr Hcllwig stated that AQ had implemented this requirement and that it would eventually resolve the problem of insufficient hazard information.
- 6. MAJCOMs review and consider Navy procedures of a periodic Ammunition Hazard Review Board to determine the continued need for waivers. Gen Gideon indicated that there was no support to create a new board for this purpose; however, the responsibilities might be added to those of an existing MAJCOM committee. The course of action being considered was an AF/SE memo to MAJCOM/CVs. Discussion: Gen Vesely recommended the memo be from CVA and the committee concurred.
- 7. Develop a waiver/exemption approval process that recognizes the joint and unified command structures to address waivers arising from joint and unified operations.

Gcn Gideon summarized the other observations of the study. Unified commands do not have Safety Offices to advise the commanders on explosives safety or other safety matters. The consequences of no longer having Weapons Safety Officers in Base Safety Offices has resulted in few officers left with weapons safety esperience for MAJCOM and HQ AF policy making. Insufficient funds available for retrograde of old munitions. He also stated that Korean units visited were very aware of the problems and were working hard on them.

Gcn Hallin and Gen Hesscrt discussed that additional funds were necessary to resolve the problems. The situation will be exacerbated by the upcoming 25% personnel reduction and the

problem of an oversight staff that does not have expertise. Col Chandler from ILMW stated over the last 5 years there had been no Personnel system to track munitions expertise, but that the AF now puts suffixes on AF Specialty Codes to identify munitions experience.

Closing Remarks

Mr McCall observed that these recommendations were consistent with the trend away from an absolutist approach in Safety to a risk based approach and to the use of more information through testing and software programs. This is better business and focuses our limited resources on the most important issues. What the committee has learned from this presentation will help us to make better decisions when the committee members address the programmatic requirements in the Corporate Board structure.

On a new issue Gen Gideon said that following the T3 accident at the AF Academy the Accident Board recommended that the AF develop a better accident response procedure to ensure early responders received adequate environment, safety, and health information on aircraft materials and chemicals. He recommended that the ESOH Committee's standing Hazardous Material Mangement subcommittee take this for action. Gen Hessert confirmed that from his experience with the F-117 crash in Baltimore that this was an important problem that needed attention and that the product needed to satisfy major accident responses. The committee concurred and the subcommittee will take for action.

Mr McCall closed the meeting by telling the committee that two important documents were being coordinated from SAF/MIQ. The first was an ESOH White Paper that documented how the AF is satisfying the three principles of being a good neighbor, sustaining readiness, and leveraging resources. He also said that SAF/MIQ was coordinating an AF policy directive that would execute the SAF Order 103.1 in Environment, Safety and Health. Mr McCall said he had not included metrics in the policy directive because he would be asking the ESOHC at a future time to develop metrics.

THOMAS W. L. MCCALL, JR.

Deputy Assistant Secretary of the Air Force

(Environment, Safety and Occupational Health)

Attachments:

- 1. Briefing Charts
- 2. Global Warming Memo

DAVID L. VESELY
Lieutenant General, USAF
Assistant Vice Chief of Staff

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¹ Distribution and courtesy copies will be made electronically beginning with the Dec 1997 minutes. Please contact LtCol Garland, garlandj@af.pentagon.mil, DSN 227-1019, if you experience difficulties receiving the minutes.



DEPARTMENT OF THE AIR FORCE HEADQUARTERS UNITED STATE&-AIR-FORCE

AQR AQRE

24 April 1998

MEMORANDUM FOR AF/CVA SAF/MI

FROM: AF/SE

SUBJECT: Item of Interest: Hazardous Materials-Handling and Disposal Following a Mishap

Air Force personnel who conducted the 25 June 1997, T-3 Class A Safety Investigation Board (SIB) at the U.S. Air Force Academy noted in their formal report the absence of standardized USAF policy, procedures, and training programs for handling composite material hazards following a mishap. The board highlighted the deficiency by preparing a formal recommendation for action and identified HQ Air Force Safety Center (HQ AFSC) as the OPR for working the issue. Further investigation by HQ AFSC penonnel revealed the scope of the problem involves not just composites, but all hazardous materials associated with aerospace vehicles (e.g. aircraft, unmanned aerial vehicles, missiles).

Specifically, the SIB and the Safety Center are concerned with the phase following the actual mishap when firefighters wearing Self Contained Breathing Apparatus (SCBA) have departed the scene. During this phase casualty recovery continues as required, explosives ordnance demolition personnel could be sweeping the site, and the interim SIB is actively "preserving evidence" while awaiting the arrival of the MAJCOM appointed permanent SIB.

Meetings at HQ AFSC with local base fire, environmental management and bioenvironmental personnel revealed their lack of knowledge and confidence in dealing with mishaps involving aerospace sysrems conraining hazardous materials, especially composites. Personnel from the Air Force Composites Program Office, Sacramento Air Logistics Center (SM-ALC), CA, and the Department of Transportation (DOT). Research and Special Programs Office, Environmental Safety Division, Oklahoma City, OK, also attended and voiced similar concerns. Of particular interest, were aircraft (e.g. C-17) that are built using significant amounts of hazardous materials.

Specific issues include the lack of readily available `information concerning the amount, type, and location of hazardous materials on aerospace vehicles. There is also lack of agreement on the short and long term effects of exposure to the hazardous materials and therefore, non-consensus about the extent of personnel protection required when investigating and/or cleaning up a mishap site.

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There appears to be an eagerness on the part of civil and military aviation organizations and authorities, from the U.S. and other countries, to share independently obtained information concerning hazardous materials on aerospace vehicles to include handling and potential health effects. Two potential vehicles for disseminating the identified information have been identified: Technical order T.O. 00-105E-9, titled "Aircraft Emergency Rescue Information (Fire Protection)" and the NATO equivalent Allied Engineering Publication (AEP) - 11 titled, "Illustrated Information on Fire Hazards and Rescue Features for NATO Aircraft." Both documents are maintained by AFCESA at the Fire Fighting Headquarters, Tyndall AFB, FL.

Request your support in bringing this issue to the HQ USAF Environmental, Safety, and Occupational Health Committee (ESOHC). I would like to propose that the ESOHC assign the I-IQ USAF Hazardous Material Management Process (HMMP) team that reports to AF/CVA and SAF/MIQ, the co-chairs, to resolve the hazardous materials issues identified by the T-3 SIB and Safety Center personnel (see attachment). The crossfunctional HMMP team has the right mix of ESOH, operational, and acquisition expertise to effectively direct this effort.

FRANCIS C. GIDEON, Jr. Major General, USAF Chief of Safety

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Attachment:

SIB Recommendation

CC:

SAF/MIQ

SAF/AQR

AETC

AFMC

AF/ILM/ILS

AF/SGO

AFCESA

AFRL-MLS/OL

FROM: T-3A, 93-0583, XQPZ19970625001A, 25 Jun 97 (SIB)

OTHER FINDING OF SIGNIFICANCE 13: The USAF has no standardized policy, procedures, or training programs to address composite material hazards following a mishap. (SUPPORT, MANAGEMENT-USAF/SE, JUDGMENT)

OTHER RECOMMENDATION OF SIGNIFICANCE 13: Disseminate standardized policies, procedures, and training programs to address composite material hazards, handling, and disposal following mishaps. (OPR: HQ AFSC; OCR: HQ AFMOA, AFMC, AETC)

PROPOSED REWRITE OF OTHER RECOMMENDATION 13 AS MULTIPLE 'OTHER RECOMMENDATIONS:"

OTHER RECOMMENDATION 13 (REWRITE): THE HQ USAF ENVIRONMENTAL, SAFETY, AND OCCUPATIONAL HEALTH COMMITTEE (ESOHC) ASSIGN THE HQ USAF HAZARDOUS MATERIALS MANAGEMENT PROCESS (HMMP) TEAM THE LEAD FOR DEVELOPING AND DISSEMINATING STANDARDIZED POLICIES, PROCEDURES, AND TRAINING PROGRAMS TO ACCOMPLISH THE FOLLOWING (OPR:HQ USAF ESOHC)

IDENTIFY ALL MATERIALS (INCLUDING COMPOSITE STRUCTURES, STRUCTURAL COATINGS, CLASSIFIED MATERIALS AND SPECIAL FLUIDS) USED IN AEROSPACE VEHICLES WHICH HAVE A KNOWN OR POSSIBLE POTENTIAL TO PRODUCE HAZARDOUS BY-PRODUCTS OR TO BE HAZARDOUS IF INHALED, INGESTED OR CONTACTED BY PERSONNEL IN A POST-CRASH OR POST-FIRE MISHAP ENVIRONMENT.

EVALUATE THE IDENTIFIED MATERIALS AND THEIR CRASH/FIRE BY-PRODUCTS TO DETERMINE THE SHORT AND LONG TERM HEAL-1-H EFFECTS OF PERSONNEL EXPOSURE IN A POST-CRASH OR POST-FIRE MISHAP ENVIRONMENT. CONSIDER EFFECTS OF VARIOUS MISHAP CONDITIONS ON THE MATERIALS TO INCLUDE COMBUSTION AND IMPACT LOADS. IDENTIFY WHICH MATERIALS ARE RELATIVELY BENIGN AND WHICH REQUIRE SPECIAL PRECAUTIONS.

UPON IDENTIFICATION OF MATERIALS WHICH REQUIRE SPECIAL PRECAUTIONS IN A POST-CRASH/FIRE ENVIRONMENT, DETERMINE THE LOCATION AND QUANTITY OF THESE MATERIALS ON ALL AEROSPACE VEHICLES BY MDS (-MISSION DESIGN SERIES).

ADDRESS PROTECTION OF PERSONNEL AT MISHAP SITES, INCLUDING THE HANDLING AND DISPOSAL OF HAZARDOUS MATERIALS FOLLOWING MISHAPS.

FOR OFFICIAL USE ONLY

HAVE HQ AFCESA INCORPORATE RELEASABLE INFORMATION AS IT IS DEVELOPED INTO T.O. 00-105E-9, AIRCRAFT EMERGENCY RESCUE INFORMATION (FIRE PROTECTION) AND THE NATO EQUIVALENT ALLIED ENGINEERING PUBLICATION (AEP) -11 T.O. TITLED "ILLUSTRATED INFORMATION ON FIRE HAZARDS AND RESCUE FEATURES FOR NATO AIRCRAFT." HAVE OPERATIONAL MAJCOMS AND HQAFSC INCORPORATE CLASSIFIED INFORMATION INTO THEIR CLASSIFIED RESPONSE GUIDES.

DISSEMINATE THE INFORMATION THROUGH OTHER U.S.
GOVERNMENT/DOD AGENCIES AND CIVIL AVIATION AUTHORITIES (E.G.
FAA, NTSB, FEMA, U.S. NAVY, U.S. ARMY, U.S. COAST GUARD) AND THE
MILITARY SERVICES/AVIATION AUTHORITIES OF OTHER COUNTRIES WITH
WHICH WE HAVE AGREEMENTS CONCERNING HAZARDOUS MATERIALS.

2 April 1998 briefing ren	noved due to illegibility	

problem of an oversight staff that does not have expertise. Col Chandler from ILMW stated over the last 5 years there had been no Personnel system to track munitions expertise, but that the AF now puts suffixes on AF Specialty Codes to identify munitions experience.

Closing Remarks

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THOMAS W. L. MCCALL, JR.

Deputy Assistant Secretary of the Air Force

(Environment, Safety and Occupational Health)

Attachment :

Briefing Charts

DAVID L. VESELY
Lieutenant General, USAF
Assistant Vice Chief of Staff



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS UNITED STATES AIR FORCE WASHINGTON, DC

15 APR 1998

MEMORANDUM FOR SAF/OS

FROM: HQ USAF/SE

9700 G Avenue SE, Suite 240 Kirtland AFB, NM 87 117-5670

SUBJECT: Explosives Quantity-Distance Exemptions and Waivers

References: (a) Your 23 Sep 1997 memo

(b) Briefing 2 Apr 1998

As directed in reference (a) memo, I have convened a team to "...examine the entire framework for granting waivers and exemptions to explosives Quantity-Distance criteria in Korea with a view to evaluating the current procedures and recommending alternative solutions." My report on this effort was contained in reference (b) briefing. The following documents my understanding of the decisions made at the briefing:

• The approval level can be lowered for some explosives safety waivers and exemptions. AF/SE is to develop a process where the approval level is based on the level of risk to be accepted and the political situation (peacetime/armistice operations vice contingency/wartime operations). The approval level will range from SAF/MI for those situations where the likelihood, exposure, and consequences of a mishap indicate the risk is high to the Wing Commander for those situations where the risk is very low. SAF/MI will determine if SAF/OS should approve particularly serious exposures. Approval of a waiver or exemption involving new construction is not delegated below SAF/OS.

*The US should actively engage the Korean government to gain recognition of, and help mitigating, explosives hazards. SAF//IA/GC will energize the proper OSD/ISA, the Joint Staff, and State Department individuals to initiate discussions with the Korean government to get recognition of the problem at higher levels in their government. Additionally, PACAF units must work with USFWJ4 to have these notifications made through the SOFA Joint Committee Facilities and Areas Subcommittee process. SAF/IA is presently exploring ways to get the State Department involved in the process. Once determined, AF/SE will prepare the necessary memos for SAF/OS signature.

• Force structure and mission planners should consider a base's ability to support required munitions operations. Force programmers and mission planners must coordinate

Garland, John, SAF/MIQ

Garland, John.. SAF/MIQ Friday, April 17,' 1998 9:33 AM McCall, Thomas, ,SAF/MIQ Coleman, John H., , SAF/MIQ; 'Drawbaugh, Rick, ,SAF/MIQ' From: Sent: To:

cc:

Subject: Minutes of the 19 Mar 98 AF Environment, Safety, and Occupational Health Committee

+++ Mr McCall -- these files are ready for you to email to principal's and staff. I recommend John Coleman add them to our web page documents as well. I can assist when you are ready to send. John +++

This email transmits the 9 Apr 98 minutes of the 19 Mar 98 AF Environment, Safety, and Occupational Health Committee meeting.

This is the second electronic distribution of the committee minutes, if your staff has difficulty with the files, the SAF/MIQ point of contact is LtCol John Garland, DSN 227-I 019.

//signed\\ THOMAS W.L. MCCALL, JR. **Deputy Assistant Secretary** of the Air Force (Environment, Safety and Occupational Health)







DEPARTMENT OF THE AIR FORCE

 $\label{eq:headquarters} \begin{array}{c} \mbox{HEADQUARTERS UNITED STATES AIR FORCE} \\ \mbox{WASHINGTON, D.C.} \end{array}$

Q 8 Jun 1998

MEMORANDUM FOR HQ USAF/QVA

FROM: HQ USAF/SE

9700 G Avenue SE, Ste 240 Kirtland AFB NM 87 117-5670

SUBJECT: ESOH Briefing on the SECAF-Directed Study of Explosives Safety Waivers and

Exemptions

At subject briefing, you expressed a desire to advise the MAJCOM/CVs about the Navy's process for periodically reviewing existing waivers and exemptions. Prior to that meeting, I had sent a copy of the study final report to the MAJCOM/CVs with the attached memo. You will note that I specifically directed their attention to that recommendation and suggested they consider its merits'. I believe your intent to draw their attention to this matter has been, accomplished; however, if you still wish, I will prepare a memo for your signature.

FRANCIS C. GÍDEON, JR. Major General, USAF

Chief of Safety

Attachment:

HQ USAF/SE Memo, 24 Apr 98

CC:

SAF/MIQ

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DEPARTMENT OF THE AIR FORCE HEADQUARTERS UNITED STATES AIR FORCE WASHINGTON, DC

24 APR 1998

MEMORANDUM FOR ALMAJCOM/CV

FROM: HQ USAF/SE

9700 G Avenue SE, Suite 240 Kirtland AFB, NM 87117-5670

SUBJECT: Explosives Safety Quantity-Distance Waivers and Exemptions

Last September, SECAF directed me to convene a team to "...examine the entire framework for granting waivers and exemptions to explosives Quantity-Distance criteria in Korea with a view to evaluating the current procedures and recommending alternative solutions." I convened a Flag Officer Steering Group of representatives from AF//IL/JA/XO/XP, SAF//AQ/GC/IA/MI, USAFE and PACAF who established an O-6 level working group to study the problem. The final report of the study was made to AF/CV and SECAF on 2 April 1998 (copy attached).

Both General Eberhart and Mr. Peters agreed to the seven recommendations from the study and we are taking steps to implement them. I am working with your safety staffs on those that involve them. I direct your attention to number six which recommends more attention to correcting existing waivers and exemptions. The Navy reports considerable success from a Pentagon level review board which visits each facility with violations of explosives safety criteria to suggest comctive measures. This is not an inspection but an assistance visit. Our steering group could not support **another** "Board" visiting our bases but agreed a properly constituted team at MAJCOM level, which periodically (3-5 year intervals) augments an already scheduled staff assistance visit, could be helpful. I suggest you consider this method of increasing the emphasis on correcting violations of explosives safety criteria.

The study was in-depth and quite an eye opening experience for **me.** We found that in many instances the requirement for explosives safety violations came as a result of planners placing missions at bases incapable of supporting the munitions requirements. You will note that recommendation three asks that force structure and mission planners consider a base's ability to support required munitions operations.

I stand ready to assist your staffs in the implementation of these recommendations.

Francis C. Giden, JR.

Major General, USAF

Chief of Safety

Attachment: Final Report